Work Orde June-12-13 9:14		2783	and published for the y	*102				Page 1				
Revision ID:	D3443-043 Strut Weldme	ent Assembly	A	Accept	*N900	040	100)* s	etup Star Stop	1 71	S1* S2*	
	6/11/13 6/11/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:						
Approvals:		an: MUT	Date: 13-06-17			ate:		R	tun Star Sto	" \]	R1* R2*	
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr D3443	Rev										14-	-0
100		Weld per dwg A/R S.S Large Fab	. rod Batch: \$\frac{120854}{}	0.00			W.L.	4				
Large Fab Large Fab		Memo Weld assen	ably as per dwg D3443	0.00								
110		QC9- Inspect visual per	QSI004- Fusion Welds	0.00				$\tilde{\omega}$			DAS	
110 QC Quality Control		Мето		0.00			,	<u>(4)</u>	1403	-19	9-89	
120 *120*	٠.	QC5- Inspect part comp	oleteness to step on W/O	0.00				(D)	60-PI	2/9)AS 9	-
QC		Memo		0.00							9-89	

Quality Control

VORK ORDER NON-CONFORM						JEORMANICE / LIDDATE								
QA Closed:			Date:			WORK ORDER NON-	-CC	JNFOI	RIVIANCE / UPDATE	W	ork Order up	odate only		AEROSPACE
Work Orde	\					DISPOSITION			AGAIN	ST DE	PARTMENT	/PROCESS		
WORK Orde	=1 · —			-	_	Rework			Chief tube Crossful		7	Water Jet	\neg	Engineering
Part N	do.						Scrap			Skid-tube Crosstube Machining Small Fab				Engineering Quality
1 ditti	.					Use-as-is			noforming Finishi		-1	d. Eng. Coor. re/Packaging	\dashv	Other
NCR N	No.					Suspected Unapproved			Large Fab Composi		1 1100,3101	Supplier	-	
										<u>L</u> .	J			
Root					Desci	ription of work order update	١	nitial	Action		Sign &			
Cause	[Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	1	QC Inspector
Design														
Doc/Data														
Equip/Tooling														
Handling/Pre												-	,	
Material			•											
Operator									,					
Offset/Setup									w ·					
Process														
Supplier	\dashv												•	
Training -														
Transport	_					•								
Unapproved					L		EAI	UT CAT	l Tegory		<u> </u>			
Landi	ng Gea	<u> </u>	· · · · · · · · · · · · · · · · · · ·			General	FA	JLI CA	IEGORY					
Carrain		nding				Bend		Folio/P	rogram		Outside Dim	ensions [ressure/Forced
			t Concer	ntric		BOM/Route		Grain	TOGITATI	-	Over/Under	<u> </u>	-	et-up
						Broken/Damage/Defect		Hardwa	re	-	Part Incorre	- t-		emperature/Cure
		-			Burrs		ł	on Incomplete/Unqualified		Part Lost/Mi	-	_	/eld	
				Contamination		1	ions Incomplete/Unclear		Part Moved	338		rong Stock Pulled		
	H H			Countersink		4	ned/off center	<u> </u>	Positioned V	L Vrong				
	Heat Treat Cut Too Short					Mislabe			Power Loss/		\neg_{\circ}	ther		
	Inspection Strip in Tube				Drawing		Misread				· [·	
	Marks/Chatter			Drill Holes	Off-set									
	Turning Sequence			Finish	Out of Calibration									
	Wave/Twist in Tube			Fit/Function	П	Out of	Seguence							

Work (Order	ID	102783
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102783

Page 2

June-12-13 9:14:02 AM D3443-043 Accept Item ID: *N900040100* Setup Start **Revision ID:** Stop Strut Weldment Assembly Item Name: 6/11/13 Start Qty: 4.00 **Start Date:** Cust Item ID: Required Date: 6/11/13 Req'd Qty: 4.00 **Customer:** Reference: Run Process Plan: _____ Date: ____ Tooling: Approvals: Date: Stop Date:____ QC: SPC (Y/N): Date: Operation Sequence ID/ Tool ID Reject Reject Set Up/ Tool # Plan Accept Insp. Number Stamp Work Center ID Description Code Qty Qty **Run Hours** White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel 0.00 130 4 \$ 14-2-24 353 *130* Powdercoat 0.00 Powder Coating 1-Mask holes as per dwg D3443 START TIME: 9:20. FINISH TIME: DAS QC3- Inspect Part Finish 0.00 140 *140* QC Memo Quality Control Identify as per dwg & Stock Location: 150 *150* 0.00 Packaging Memo Packaging

DA: 26 9-8

DQA:			Date:			—								
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / U		Wc	ork Order up	date only	AEROSPACE
						DISPOSITION						•	<u></u>	
Work Orde	er: _					DISPOSITION		AGAINST DEPARTMENT/PROCESS						
						Rework			Skid-tube Crosstube				Water Jet	Engineering
Part N	Part No				Scrap	Scrap			Machining Small Fab			d. Eng. Coor.	Quality	
						Use-as-is			noforming	Finishing	_	Rec/Stor	re/Packaging	Other
NCR N	10					Suspected Unapproved Large Fab Composite Supplier] [
Root					Desci	ription of work order update	ı	nitial	Act	tion		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desci	ription		Date	Verification	QC Inspector
Design	╝													
Doc/Data	_										i			
Equip/Tooling	_													
Handling/Pre	_													
Material	_													
Operator	_						1							
Offset/Setup				:										
Process										1				
Supplier 														
Training	\vdash													
Transport	\vdash			:										
Unapproved				<u> </u>	<u> </u>		EAL	LILT CAT	TEGORY					
Landii	ng G	Gear				General	17	OLI CA	ILGORT					
		Bending				Bend	Г] Folio/F	rogram			Outside Dim	ensions [Pressure/Forced
	-	Centre No	ot Concer	ntric		BOM/Route		Grain				Over/Under	⊢	Set-up
	-	Cracks				Broken/Damage/Defect	H	Hardwa	ire			Part Incorre	├	Temperature/Cure
			ık/Ripple	/Wave		Burrs		┪	ion Incomplete/U	ngualified		Part Lost/Mi	⊢	Weld
	-	Crimp/Kink/Ripple/Wave Burrs Cuffs Contamination					1	ions Incomplete/			Part Moved		Wrong Stock Pulled	
	-	Crushing Countersink						4	ned/off center	• •	$\overline{}$	Positioned V	∟_ Vrong	
-		Heat Treat Cut Too Short				\vdash	Mislabeled Power Loss/Surge				_	Other		
		Inspection Strip in Tube Drawing			Drawing		Misread		•		•		1	
		Marks/Chatter Drill Holes				Off-set								
	Turning Sequence Fin			Finish		Out of	Calibration							
	Wave/Twist in Tube					Fit/Function	Out of Sequence							

Work Ord June-12-13 9:		102783		*102	783*				Page 3
Item ID: Revision ID: Item Name:	D3443-04 Strut Weld	43 Iment Assembly		Accept	*N900	040100)* s	etup Start Stop	וליאו
Start Date: Required Date Reference:	6/11/13 e: 6/11/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item II Customer:	D:		0.	
Approvals:	Process QC:	Plan:	Date:	Tooling: SPC (Y/N):		nte:	R	tun Start Stop	"NRT"
Sequence ID/ Work Center 160 *160* QC Quality Control	ID	Operation Description QC21- Final Inspection Memo	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool# Plan Code	Accept Qty	Reject Qty M/4-	Reject Insp. Number Stamp

JQA: _		. Date:	WORK ORDER NON-CONFORMANCE / UPDATE							DART.		
QA Closed:		Date:			WORK ORDER NON-	٠	JINFUI	RIVIAINCE / UF		ork Order up	odate only	AEROSPACE
Work Orde	r.				DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS	
	Part No.				Rework Scrap Use-as-is	Scrap			Skid-tube Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	0				Suspected Unapproved	:		Large Fab	Composite		Supplier	
Root				Desci	ription of work order update		nitial	Act	ion	Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved												
Onapproved	<u> </u>	<u>, k</u>	1	<u> </u>		FAI	ULT CA	TEGORY		<u>l</u>		
Landir	ng Gear				General							<u>.</u> ,
	Bending Centre N	ot Conce	ntric		Bend BOM/Route		Grain	Program	F	Outside Dim Over/Under	tolerance	Pressure/Forced Set-up
	Cracks Crimp/Kink/Ripple/Wave				Broken/Damage/Defect Burrs		1	ion Incomplete/Ur	_	Part Incorre	 	Temperature/Cure Weld
	Cuffs		-	Contamination	H	4	tions Incomplete/U	Inclear	Part Moved	L	Wrong Stock Pulled	
	Crushing Heat Treat			Countersink Cut Too Short	\vdash	Mislabe	gned/off center eled	-	Positioned V Power Loss/	_	Other	
	Inspection Strip in Tube				Drawing		Misrea		L.		<u> </u>	
	Marks/Cl	· .			Drill Holes		Off-set					
Ì	Turning S				Finish	\vdash	1	Calibration				
	Wave/Twist in Tube			Fit/Function	Out of Sequence							

Picklist Print

June-12-13 9:14:01 AM

Work Order ID:

102783

Parent Item:

D3443-043

Parent Item Name:

Strut Weldment Assembly

Start Date: 6/11/13

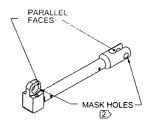
Required Date: 6/11/13

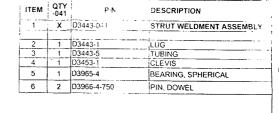
Start Qty: 4.00

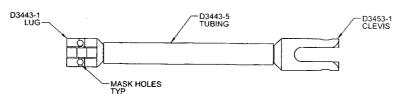
Required Qty: 4.00

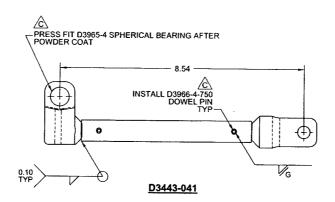
Comments:	IPP REV. A 05.1	1.17 NEW ISS	UE	EC									
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3443-3 Clevis		Manufactured	No	TI.	28791	100	Each	0.0000	1 2	77 4			
D3443-7 Tubing		Manufactured	No			100	Each	4.0000	1	4			
C				Location WA002\109	373 }	<u>Loc Qty</u> 4 2	Lo	oc Code	-4	G_{-}			
D3966-4-750 Pin, Dowel		Manufactured	No	871:	36	100	Each	44.0000	1	4			
				Location		Loc Qty	<u>La</u>	oc Code					
				ST080	66	12 12							
				WA002	75	32 32			19				

DQA:			Date:			WORK ORDER NON-CONFORMANCE / UPDATE							"DART		
QA Closed:			Date:			WORK ORDER NON-	٠٠(JINFO	RIVIAINCE / U	PUAIE	W	ork Order up	odate only	\neg	AEROSPACE
Manl. Onda						DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS		,
Work Orde	er:					Rework			Skid-tube	Crosstubo		1	Water Jet	\neg	Cnaine aring [
Part N	lo.					Scrap			Skid-tube Crosstube Machining Small Fab			Pro	d. Eng. Coor.	\dashv	Engineering Quality
i di Ci	•••-					Use-as-is	` 			Finishing	_	4	re/Packaging	ㅓ	Other
NCR N	lo.					Suspected Unapproved		111611	Large Fab	Composite		1 1100,5101	Supplier	┪	
Root					Desci	ription of work order update	1	nitial	Act	tion		Sign &			
Cause	D	ate	Step	Qty		or non-conformance	Ch	ief Eng	Desci	ription		Date	Verification	\Box	QC Inspector
Design															
Doc/Data															
Equip/Tooling						-									
Handling/Pre															
Material														-	
Operator															
Offset/Setup														- 1	
Process						-								I	
Supplier									1						
Training							l								
Transport															
Unapproved														ı	
							FA	ULT CA	TEGORY						
Landi	ng Gear					General		_		•					
	Ber	ding				Bend		Folio/F	rogram			Outside Dim	ensions		Pressure/Forced
	Cer	tre No	t Concer	ntric		BOM/Route		Grain				Over/Under	tolerance	П	Set-up
	Cra	cks				Broken/Damage/Defect		Hardwa	ire			Part Incorred	ct	\Box	Temperature/Cure
	Crir	np/Kin	k/Ripple	/Wave		Burrs		Inspect	ion Incomplete/U	nqualified		Part Lost/Mi	ssing	\neg	Weld
	Cuf	fs				Contamination		Instruct	ions Incomplete/	Unclear		Part Moved			Wrong Stock Pulled
	Cru	shing	Countersink					Misalig	ned/off center			Positioned V	Vrong		
٠	Hea	it Treat	t			Cut Too Short		Mislabeled				Power Loss/	Surge	\neg	Other
	Ins	Inspection Strip in Tube Drawing					Misrea	d			=	_			
	Ma	Marks/Chatter Drill Holes			Drill Holes	Off-set					_				
	Turning Sequence				Finish	Out of Calibration					:				
	Wave/Twist in Tube					Fit/Function	Out of Sequence								









102783 MLJ 13-06-12

DESIGN DRAWN		RF RF	DART AEROSPA HAWKESBURY, ONTARK		
REV.		DE	SCRIPTION	BY	DATE
Α	NEW IS	SUE		RF	05.09.02
В	ADDED TOLER	-9 PIN; REMOVED ANCE; & Ø0.125 W	BALL PLUNGER; REVISE VAS #30	RF	05.12.05
С	WAS 1. WAS RO C6-1, B	D NOTE #2 (ZN A8 53 (ZN C2-3), 0.551 0.050 (ZN C4-3), D3	CURRENT STANDARDS. 3-1, A8-2); 0.820 WAS 0.720 & 1.43 I WAS 0.451 (ZN C1-3); R0.219 3965-4 WAS SPAENAUR PIN (ZN WAS McMASTER-CARR PIN (ZN	RF	09.06.25

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	01	DRAWING NO. REV. C
MFG. APPR.	ZIK.	D3443 SHEET 1 OF 4
APPROVED	JUNE	TITLE SCALE
DE APPR.	-#	STRUT WELDMENT ASSEMBLYNTS
DATE 09.0	6.25	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS REWARD AND CONSERVING AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY IMPOSED OR CONCENDENTED TO MY OTE, EXPRESSOR WITHOUT

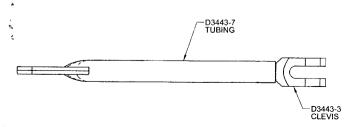
NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
NO POWDER COAT IN HOLES
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED

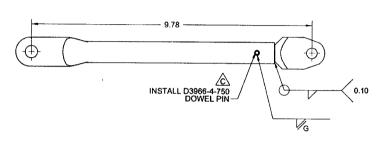
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

7) WEIGHT: 1.33 lbs 8) WELD PER DART QSI 004

PARALLEL FACES
P.
The state of the s
MASK HOLES

ITEM	QTY -043	P!N	DESCRIPTION
1	Х	D3443-043	STRUT WELDMENT ASSELIBLY
2	1	†D3443-3	CLEVIS
3	1_	:D3443-7	TUBING
4	1	D3966-4-750	PIN





D3443-043



NOTES:

1) MATERIAL: N/A

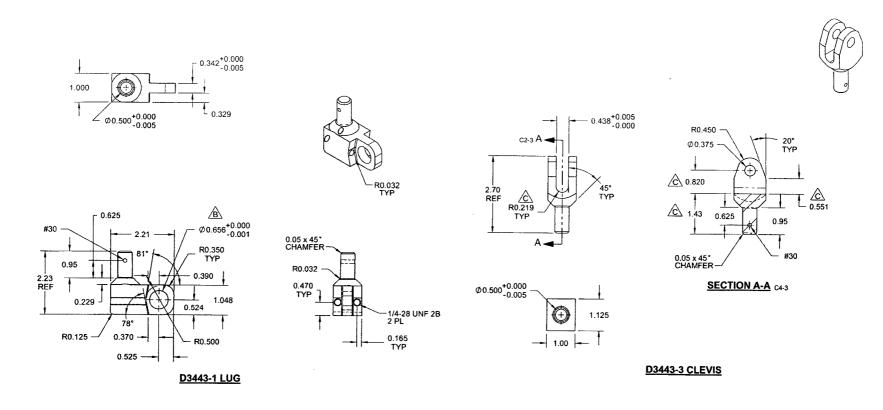
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
NO POWDER COAT IN HOLES
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.97 lbs
8) WELD PER DART QSI 004

DESIGN	RF	
DRAWN	RF	
CHECKED	00	DRA
MFG, APPR.	11 K	D3
APPROVED	XM	TITL
DE APPR.		ST
DATE 09.0	06.25	FILES

	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
A	DRAWING NO. REV. C D3443 SHEET 2 OF 4		
	SCALE STRUT WELDMENT ASSEMBLYNTS		
-	CODVEIGHT & 2006 BY DART ACROCRACE LTD		

D

С



NOTES:
1) MATERIAL: D3443-1 = 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)
D3443-3 = AISI 304 SS ROUND BAR (REF. DART SPEC M304R)
2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

8

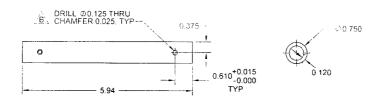
Α

6) IDENTIFICATION: NONE 7) WEIGHT: D3443-1 = 0.50 lbs D3443-3 = 0.35 lbs

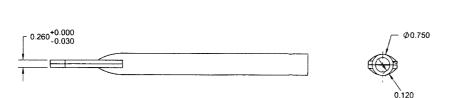
DESIGN RF DART AEROSPACE LTD DRAWN RF HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. C D3443 MFG. APPR. SHEET 3 OF 4 APPROVED TITLE SCALE STRILL WELDMENT ASSEMBLYNTS

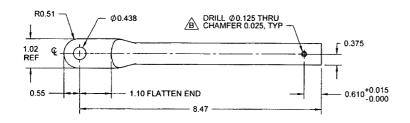
COPYRIGHT © 2005 BY DART AEROSPACE LTD

The GOOGRAFF AFRICTS AND COPYRIGHT WAS BE SERVED ON THE ETHER GOOGRAFT IN NOT TO BE URED ON ANY PROPERTY OF THE SERVED ON THE STRIPLE ON THE SERVED ON THE SE DE APPR. DATE 09.06.25



D3443-5 TUBING





D3443-7 TUBING



DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	.00	DRAWING NO.	REV. C
MFG. APPR.	M \(\cdot \)	D3443	SHEET 4 OF 4
APPROVED	W	TITLE	SCALE
DE APPR.		STRUT WELDMENT ASS	EMBLY NTS
DATE 09.06.25		COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS OCCUPY IS PRIVATE MO COMPENTAL MOST SPREED ON THE STRESS CHORDON THAT IT IS NOT TO BE USED FOR MY PARTNES ON CONCED OF COMMENDATION TO MENT PERSON WITHOUT	

1.05

D3443-9 PIN

D3443-9 NOTES:

1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAL (REF. DART SPEC M-DELRIN-R)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT. NA

D3443-5/-7 NOTES:
1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.750W.120) 1) MATERIAL: AISI 316/304 SS SEAMLESS TOURISE (AISI: AISI: A

5

,50.210^{+0.005}

7) WEIGHT: N/A

2